What is claimed:

1. A vaccine formulation, comprising: an attenuated negative strand RNA virus having an interferon antagonist phenotype that (a) is responsible for attenuation, and (b) permits the attenuated virus to grow to higher titers in interferon-deficient host systems as compared to interferon-competent host systems, when propagated under the same conditions; and a physiologically acceptable excipient.

2. The vaccine formulation of Claim 1 in which the attenuated virus is selected from naturally occurring viruses, mutagenized viruses or reassortants.

3. The vaccine formulation of Claim 1 in which the attenuated virus is selected from genetically engineered mutants.

4. The vaccine formulation of Claim 3 in which the attenuated virus is a chimeric virus that expresses an epitope of a foreign pathogen.

5. The vaccine formulation of Claim 1, 2, 3 or 4 in which the attenuated virus is an influenza virus.

6. A vaccine formulation comprising an attenuated influenza virus that has a mutation in the NS1 gene responsible for the attenuated phenotype, and a physiologically acceptable excipient.

7. The vaccine formulation of Claim 1, 2, 3 or 4 in which the attenuated virus is a respiratory syncytial virus.

8. The vaccine formulation of Claim 1, 2, 3 or 4 in which the attenuated virus is a parainfluenza virus.

9. The vaccine formulation of Claim 1, 2, 3 or 4 in which the attenuated virus is a vesicular stomatitis virus.

10. The vaccine formulation of Claim 1, 2, 3 or 4 in which the attenuated virus is Newcastle disease virus.

11. The vaccine formulation of Claim 1 in which the interferon-deficient host system is STAT1 negative and the interferon-competent host system is STAT1 positive.

12. The vaccine formulation of Claim 5 in which the interferon-deficient host system is an embryonated chicken egg of about 6 to about 8 days old, and the interferon-competent host system is an embryonated chicken egg of about 10 to about 12 days old.

13. The vaccine formulation of Claim 8 in which the interferon-deficient host system is an embryonated chicken egg of about 6 to about 8 days old, and the interferon-competent host system is an embryonated chicken egg of about 10 to about 12 days old.

14. The vaccine formulation of Claim 9 in which the interferon-deficient host system is an embryonated chicken egg of about 6 to about 8 days old, and the interferon-competent host system is an embryonated chicken egg of about 10 to about 12 days old.

15. The vaccine formulation of Claim 10 in which the interferon-deficient host system is an embryonated chicken egg of about 6 to about 8 days old, and the interferon-competent host system is an embryonated chicken egg of about 10 to about 12 days old.

16. The vaccine formulation of Claim 1 or 11 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the titer of attenuated virus propagated in the interferon-competent host system.

17. The vaccine formulation of Claim 12 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the

titer of attenuated virus propagated in the interferon-competent host system.

18. The vaccine formulation of Claim 13 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the titer of attenuated virus propagated in the interferon-competent host system.

19. The vaccine formulation of Claim 14 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the titer of attenuated virus propagated in the interferon-competent host system.

20. The vaccine formulation of Claim 15 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the titer of attenuated virus propagated in the interferon-competent host system.

21. The vaccine formulation of Claim 5 in which the attenuated influenza virus concentration is about 10^4 to about 5×10^6 pfu per dose.

22. The vaccine formulation of Claim 6 in which the attenuated influenza virus concentration is about 10^4 to about 5×10^6 pfu per dose.

23. A pharmaceutical formulation, comprising: an attenuated negative strand RNA virus having an interferon antagonist phenotype that (a) is responsible for attenuation, and (b) permits the attenuated virus to grow to higher titers in interferon-deficient host systems as compared to interferon-competent host systems, when propagated under the same conditions; and a physiologically acceptable excipient.

24. The pharmaceutical formulation of Claim 23 in which the attenuated virus is selected from naturally occurring viruses, mutagenized viruses or reassortants.

25. The pharmaceutical formulation of Claim 23 in which the attenuated virus is selected from genetically engineered mutants.

26. The pharmaceutical formulation of Claim 25 in which the attenuated virus is a chimeric virus that expresses an epitope of a foreign pathogen.

27. The pharmaceutical formulation of Claim 23, 24, 25, or 26 in which the attenuated virus is an influenza virus.

28. A pharmaceutical formulation comprising an attenuated influenza virus that has a mutation in the NS1 gene responsible for the attenuated phenotype, and a physiologically acceptable excipient.

29. The pharmaceutical formulation of Claim 23, 24, 25 or 26 in which the attenuated virus is a respiratory syncytial virus.

30. The pharmaceutical formulation of Claim 23, 24, 25 or 26 in which the attenuated virus is a parainfluenza virus.

31. The pharmaceutical formulation of Claim 23, 24, 25 or 26 in which the attenuated virus is a vesicular stomatitis virus.

32. The pharmaceutical formulation of Claim 23, 24, 25 or 26 in which the attenuated virus is Newcastle disease virus.

33. The pharmaceutical formulation of Claim 23 in which the interferon-deficient host system is STAT1 negative and the interferon-competent host system is STAT1 positive.

34. The pharmaceutical formulation of Claim 27 in which the interferon-deficient host system is an embryonated chicken egg of about 6 to about 8 days old, and the interferon-competent host system is an embryonated chicken egg of about 10 to 12 days old.

35. The pharmaceutical formulation of Claim 30 in which the interferon-deficient host system is an embryonated chicken egg of about 6 to about 8 days old, and the interferon-competent host system is an embryonated chicken egg of about 10 to 12 days old.

36. The pharmaceutical formulation of Claim 31 in which the interferon-deficient host system is an embryonated chicken egg of about 6 to about 8 days old, and the interferon-competent host system is an embryonated chicken egg of about 10 to 12 days old.

37. The pharmaceutical formulation of Claim 32 in which the interferon-deficient host system is an embryonated chicken egg of about 6 to about 8 days old, and the interferon-competent host system is an embryonated chicken egg of about 10 to 12 days old.

38. The pharmaceutical formulation of Claim 23 or 33 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the titer of attenuated virus propagated in the interferon-competent host system.

39. The pharmaceutical formulation of Claim 34 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the titer of attenuated virus propagated in the interferon-competent host system.

40. The pharmaceutical formulation of Claim 35 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the

titer of attenuated virus propagated in the interferon-competent host system.

41. The pharmaceutical formulation of Claim 36 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the titer of attenuated virus propagated in the interferon-competent host system.

42. The pharmaceutical formulation of Claim 37 in which the titer of attenuated virus propagated in the interferon-deficient host system is at least one log greater than the titer of attenuated virus propagated in the interferon-competent host system.

43. The pharmaceutical formulation of Claim 27 in which the attenuated influenza virus concentration is about 10^4 to about 5×10^6 pfu per dose.

44. The pharmaceutical formulation of Claim 28 in which the attenuated influenza virus concentration is about 10^4 to about 5×10^6 pfu per dose.

45. An attenuated influenza virus containing a modified NS1 gene and an altered interferon antagonist phenotype.

46. The attenuated influenza virus of Claim 45, in which the NS1 gene is modified or truncated at the carboxy terminus.

47. The attenuated influenza virus of Claim 45, in which the NS1 gene is modified at the amino terminus.

48. The attenuated influenza virus of Claim 45 which is NS1/99.

49. A method for vaccinating a subject, comprising administering the vaccine formulation of Claim 1 or 6 to the subject at a dose effective to elicit an immune response.

50. A method for the prevention of infectious disease in a subject, comprising administering the pharmaceutical formulation of Claim 23 or 28 to the subject at a dose effective to induce a cellular interferon response.

51. A method for the treatment or prevention of tumors in a subject, comprising administering the pharmaceutical formulation of Claim 23 or 28 to the subject at a dose effective to induce a cellular interferon response or oncolysis.